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ABSTRACT

Suicide rates vary greatly by sex and race, but the methods employed by these groups have not been studied closely and across time. Annual official national statistics for specific methods of suicide by sex and specific racial group were examined from 1923 to 1978. During this time period, shifts occurred in the proportions of suicides by method, most noteably for women and Asian-American groups. Although women continued to kill themselves with solid and liquid poisons more often than men, in recent years firearms became a more frequent method. Among Japanese- and Chinese-Americans, the most common methods of suicide were hanging, strangulation, and suffocation. However, the proportions declined over time, while those for methods such as firearms increased. Firearms continued to be the method most often used in completed suicides by Caucasian, Black, and American Indian males. Results suggest that acculturation, changing societal roles, and problems with the compilation of official statistics may be possible factors affecting changes in method choice. (Author/NRB)

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Changing Patterns In Methods Of Suicide By Race And Sex

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Changing Patterns in Methods of Suicide by Race and Sex

Studies of the manner by which individuals kill themselves have revealed consistent differences by demographic characteristics, especially with respect to sex and race (e.g., Boor, 1981). Few studies, however, have looked at long term trends regarding suicide methods and none could be found that have done so for specific racial minorities. The present investigation, therefore, will review suicide methods for official U.S. completed suicides by race and sex from the earliest available time to the present (i.e., 1923-1978).

Traditionally, suicide methods have differed greatly between the sexes. Earlier literature abounds with data showing that males most often employ firearms while rarely using poisons, especially solids or liquids. Females, on the other hand, were found to most often use solid or liquid poisons with firearms trailing often quite far behind (see, e.g., Lester, 1979). When looking at race as well as sex, a slightly different picture emerges. Whites of both sexes and Nonwhite males (especially Blacks) have been observed to follow the trends noted above for the sexes, but Nonwhite females (especially Blacks) have been shown to frequently employ firearms more often than poisons. The proportion of firearm use in this latter case is lower than for males of the same racial groups, while poison use is much higher. In other words, for Nonwhite females firearms have been found to be used most often but the use of poisons have followed closely behind.

In addition to racial and sex differences in suicide method choice, most studies have looked at differences by comparing

regions of the nation or specific geographic locations or cities. Usually selected or only a few years' data have been investigated (e.g., French & Wailes, 1980, White vs. Black by sex, Nebraska vs. Mississippi, 1969-1976 data; Marks & Abernathy, 1974, White by sex, U.S. data for each fifth year from 1940 to 1965; Swanson & Breed, 1976, White vs. Black by sex, 1966-1970 data for New Orleans; Taylor & Wicks, 1980, White vs. Nonwhite by sex, 1969-1971 data for 5 U.S. cities). In a recent survey (Boor, 1981), however, a more extensive number of years (1962-1975) of national data were investigated for differences in methods of suicide between Whites and Nonwhites by sex. Boor reported that over that time period increases in suicide by firearms occurred for all sex-race groups. The mean proportions of suicides by both firearms and poisons were approximately 30% for White and Nonwhite females, while firearms accounted for approximately 60% of White and Nonwhite male suicides, with poisons being less than 10%. Incomplete data with respect to long term (annual) trends are given for methods other than firearms, but Boor indicates that solid/liquid poison use (rates) among Nonwhite females increased over the time period as did the use of gas poisons for White women.

With the exception of Blacks or all Nonwhites combined as a single grouping, little research has focused on specific racial/ethnic groups and suicide methods. McIntosh (1980) reviewed the literature on suicide among U.S. racial minorities, including that pertaining to their choice of methods. The studies of racial/ethnic groups (primarily in specific geographic locations, i.e., few national surveys) reported there suggest that Asian-Americans (Chinese and Japanese) of both

sexes rarely employed firearms as a method of suicide. These Asian-American groups most often killed themselves by hanging[1]. Comparing earlier national data for 1959 (Dublin, 1963, p. 43) with more recent years' figures (1974-1976), however, McIntosh (1980) observed a trend toward increased use of firearms and decreased use of hanging. Despite these trends, however, hanging remained the most employed method and firearms lagged far behind. For 1976 the percentages of total suicides were approximately 40% for Asian-Americans of both sexes by hanging.

Suicide methods for Native Americans (American Indians) have been observed to parallel those for Blacks. That is, both males and females more often employed firearms than poisons. McIntosh's (1980) consideration of 1976 data, for example, found the percentages of total suicides for Indian males to be 66.0 and 2.8 by firearms and solid/liquid poisons, respectively, and the corresponding female percentages to be 47.1 and 29.4.

Another result noted in the McIntosh consideration of 1976 vs. earlier data focused on changes in method choice by sex. With the exception of Asian-American groups, McIntosh found for 1976 that all sex-race groups (all races combined, all Nonwhites combined, Whites, Blacks, Indians) employed firearms most often. This is in contrast to earlier results which indicated a close proportion for solid/liquid poisons and firearms among women in general and especially White women. It should be noted that poisons were separated into gas vs. solid/liquid for the analysis, a procedure which is not often performed by other researchers. In earlier years the differences had been greater between the two methods (firearms and solid/liquid poisons), so that apparently a change occurred by 1976. Such an increasing

tendency in the use of firearms was also observed by Boor (1981) as noted above, although no reversal in preference was observed.

The present investigation looked at long term trends from 1923-1978 in suicide method by sex and race. It was hypothesized that such an examination would reveal the increasing use of firearms by all race-sex groups. The possible trends for other methods were less clear from the available literature, especially regarding specific racial minorities.

Data

The number of suicides by each sex and racial/ethnic group were taken from an annually published table (since 1969 it has been Table 1-25) in Vital Statistics of the United States (and Mortality Statistics from 1923-1936) which presents specific methods by specific race (White, Black, Indian, Chinese, Japanese) and sex (1923-1964, 1966-1967, 1969-1975: NCHS, annual volumes; 1976: McIntosh, 1980; 1965, 1968, 1977-1978: NCHS, Note 1). Because of the small number of suicides involved for many of the racial-sex groupings, and because data presentation and availability changed through time, periods of approximately ten years (1923-1929, 1930-1938, 1939-1948, 1949-1959, 1960-1969, 1970-1978) were considered. The proportion of the total number of suicides was computed for each of the specific methods of suicide for each time period.

Two difficulties with the data as presented in these tables are their inconsistencies and changes. For instance, data for suicide methods are available only for poisons for 1939-1948. In addition, even though data for poisons are available for the entire period of study, they are available by specific poisons

(i.e., gas vs. solid or liquid) only for 1923-1938 and 1968 to the present.

The figures presented in these tables represent official U.S. statistics for suicide method. Although the validity of official statistics have been questioned (e.g., Douglas, 1967), they are the best systematically compiled and available data for suicide, and there is evidence to suggest that no systematic bias exists (Sainsbury & Barraclough, cited in Lester, 1972). It can also be suggested that although not perfect, official suicide figures are at least the minimum number of such deaths that occur (Hatton, Valente, & Rink, 1977).

One of the specific difficulties with official data that should be noted with regard to the long term figures presented here is that the international classification system of deaths used by the U.S. and most other countries is revised about every ten years. The last such (9th) revision took place in 1979 and does not affect this study since data presented here stop at 1978. Prior to 1979, the most recent revision (8th) took effect in 1968. This changing classification system could affect determinations by methods. In particular, in 1968 a category of "injury undetermined whether accidentally or purposely inflicted" was added to existing categories for natural causes, homicide, suicide, and accident. As this category's addition might affect the number of deaths classified as suicide, it might also affect the distribution of deaths by methods employed. It is reasonable to assume that some methods (e.g., poisons) are more likely than others (e.g., hanging or firearms) to be difficult to determine the intent of the victim. If so, methods such as poisoning would be underrepresented, and

correspondingly, those such as firearms and hanging overrepresented during that time period. Murphy (1979) discussed the issues surrounding this category and mentioned that in only a small number of cases (maybe as few as 1-5%) is there difficulty in making a determination of cause. In addition comparability rates for the 7th and 8th revisions for suicide are extremely high (0.9393; Seiden & Freitas, 1980, p. 2070), suggesting little difference between the two revisions. Therefore, although the "undetermined" category is a potential source of bias to deaths by suicide and for suicide methods, it seems to be a minor problem.

Trends in Suicide Methods

Males

As expected, firearms have been and continue to be the method most often used in completed suicide by White, Black, and Indian males while hanging is for Japanese- and Chinese-American males.

Firearms. A clear picture with respect to the use of firearms occurred only for White and Black males over the entire period of the study. As can be seen in Table 1, firearm use in official suicides increased for each available time period. The percentages for Whites increased from just over 40% in the 1920's to slightly more than 60% for the 1970's while increases for Blacks during the same time periods were from nearly 50% to slightly more than 60%. For the entire time period firearms were clearly the method of choice for these males (see also Figure 1).

Insert Table 1 and Figure 1 about here

The trends for the other racial groupings are less clear though males of the two Asian-American groups obviously have and continue to employ firearms less often than the others. Recent increases (since the 1950's) in firearm use can be seen, though, especially for Japanese-American males. It should be noted, however, that the percentages of the 1960's and 1970's are similar to those for the 1920's and 1930's. Declines in use apparently occurred between the late 1930's and the late 1940's followed by the present slight increases. Interestingly, during the 1920's and 1930's firearm use and hanging were not as distinct (i.e., no clear preference for hanging) for Chinese-American males as available literature would suggest. In fact, firearms accounted for a slightly greater proportion of suicides than did hanging from 1930-1938. Even with the recent increases in firearm use, the percentages among the Asian-American males are less than half those for males of the other racial categories.

Among Native American males, firearms represented at least 60% of suicides for each available time period. Contrary to the picture among Black and White males, for whom a similar proportion was reached in the 1970's, the trend since at least the 1950's has been toward decreased percentages in the use of firearms by Indian males.

Hanging. Although still the most preferred method among Japanese- and Chinese-American males, hanging has declined at least since the 1950's for both Asian-American groups. This

downward trend since the 1950's can also be seen for White males.

On the other hand, the use of hanging as a suicide method among Black and Indian males have basically shown increases throughout the entire time period under investigation.

Poisons. Poisons (solid/liquid and gas combined) are plainly a less preferred method of suicide by males of all races. Most noteably, poisons accounted for less than 10% of Native American male suicides for each time period considered. A fairly consistent and low proportion can be seen for Japanese-American males while slight increases are observed for Chinese-American males. Obvious declines are evident for Black males while slight declines are seen for White males. The result of the increased use of hanging and decreased use of poisons among Black males has resulted in a reversal in their contributions (ranking) to suicides of this group.

Females

As consistently shown in the literature, women of all racial groupings commit suicide with poisons more often proportionately than do men of their own race.

Firearms. The increase in the use of firearms by White and Nonwhite females is quite apparent for White and Black women over the entire period of study, more than doubling for both groups from 1923-29 to 1970-1978. Poisons (combination of gases and solid/liquid) were employed more often for White females but the gap between firearms and poisons decreased substantially (see Figure 1). For Black women firearms have been the most employed method since at least the 1950's.

No clear pattern can be seen for Indian females regarding the use of firearms. For 1970-1978 though, the proportion of suicides by firearms was similar to, and actually slightly higher than, that for poisons. Little change in the use of firearms can be observed for Japanese-American women, but firearms were definitely used less often than either poisons or hanging for this female group. Similarly, firearms were not often employed by Chinese-American women either. However, slight increases from the level of the 1950's can be seen.

Hanging. This method accounted for a consistently substantial proportion of female suicides only for the two Asian-American groups. With the exception of the 1920's and 1930's for Japanese-American women, hanging easily ranked first in the percentage of suicides for Japanese- and Chinese-American females. Hanging was the least often employed method considered here for Indian women but trends over time are not clear. This method also ranked lowest for Black and White women for each time period and for both a decrease in its use has occurred since at least the 1950's.

Poisons. As the literature indicated, poisons were the most employed method by White females over the entire period of this investigation. Such a preference was also seen for Black women from the 1920's through the 1940's, but a great decrease occurred in the 1950's followed since by a slight increase. A similar, though less pronounced pattern can be seen for White females over that time period.

With the exception of the 1950's, Indian females have killed themselves with poisons in a rather high proportion of suicidal deaths. Poisons have usually ranked second behind

hanging for the two Asian-American groups considered here. No clear pattern emerges for Chinese-American women, but among Japanese-American females poisons were the most employed method in the 1920's and 1930's, followed in the 1940's by a dramatic decline and slight increases for the time periods thereafter.

Solid/liquid poisoning vs. gas poisoning

A look at Figure 2 reveals that gas poisoning as a method of suicide was more often a White than a Black phenomenon. Solid/liquid poisons were most often used by White and Black females and Black males. White males, on the other hand, used gas poisoning to kill themselves more often than solids and liquids. Poisons are currently less often used than in the 1920's and 1930's for Blacks and Whites of both sexes. Also apparent in recent times (at least since the late 1960's) are declines in solid/liquid poison use among White women to the point that firearms comprise a larger percentage of their annual suicides. Unfortunately, figures are unavailable which allow study of suicides by gas vs. solid/liquid poisons for 1939-1967. Only inferences from available data can be made.

Insert Figure 2 about here

Other methods

Two specific methods which have been suggested in the literature to be especially important for particular racial/ethnic groups will also be considered here. The results of this study and others (e.g., Iga, 1961, 1967; McIntosh, 1980;

Wen, 1974) have observed that Japanese-Americans rarely kill themselves employing knives, despite their heritage and the much publicized "harakiri". It seems that cutting was never a common method by this group in America. Available data here (1923-1938) show no great differences for Japanese-Americans from other ethnic/racial groups for this method. All groups employed cutting in only about 10% or less of their suicides, including Japanese-Americans (1923-1929: males--9.9%, females--9.8%; 1930-1938: males--7.4%, females--5.7%). McIntosh (1980) found that only one Japanese-American male and no females in 1976 used cutting and piercing instruments to kill themselves.

Some researchers (Hendin, 1969; Monk & Warshauer, 1974) have observed jumping from heights to be an important method of suicide for Blacks. These two investigations found that 74% and 63% of the Black suicides in the urban areas they studied killed themselves by jumping from heights. Available figures in the present investigation provide little support for this method as a significant one for Blacks or any other racial group. These data for 1933-1938 indicate that less than 10% of Blacks of either sex employed this method and McIntosh (1980, 1976 data) observed that only 5.5% of Blacks jumped to their deaths.

Discussion

A major and important finding from the results of this investigation is that no single statement with respect to methods of suicide can describe the range of patterns displayed by the various sex-racial/ethnic groups. It is clear, then, that past assumptions and statements regarding suicide (and methods) which imply homogeneity among the racial groupings comprising the Nonwhite population are misleading. To some

degree each specific sex-racial/ethnic group displays its own rather unique pattern and history of methods of suicide. Such a picture is consistent with earlier research on suicide among racial groups. That body of research (McIntosh, 1980; McIntosh & Santos, in press; McIntosh, Hubbard, & Santos, Note 2) indicates similar heterogeneity rather than homogeneity for suicide rates by age and over time for the specific racial groups.

Some nearly general observations that can be made from the present findings would be that 1) Asian-Americans of both sexes prefer (i.e., use most often) hanging as a method of suicide. 2) Non-Asian males most often employ firearms. 3) Females generally kill themselves much more often with poisons than do males though firearms are employed slightly more (Blacks, Indians) or less (Whites) often than poisons among non-Asian females.

The closest the present findings come to a general statement for trends in suicide methods regards firearm utilization. With the exception of the Indian population, among whom firearm use has been relatively high for males and even females for as long as official records have been kept, firearms as a method of suicide has increased for all sex-race groups. This trend has been particularly apparent since the 1950's.

Sex differences in method choice observed by other researchers were largely supported here. In general, males employed firearms in greater proportions than did women, while women killed themselves using poisons more often than did men. One explanation for these differences has been discussed elsewhere (e.g., Lester, 1972, 1979). It was suggested that

women choose less violent methods than males because they do not want to disfigure themselves--i.e., they display a generally greater concern for bodily appearance both in life and after death. Additionally, Seiden (1977) proposes that women use less violent methods due to "their upbringing and differing cultural expectations" (p. 268), and their lower intention to die.

Several other questions arise from the general findings noted above and other results of this investigation related to changing patterns in methods of suicide. Why has the use of firearms increased for nearly all race-sex groups? Why has the utilization of firearms decreased among Native American suicides? Why the decline in the proportion of suicides by poisons, especially for Blacks and Whites of both sexes? Why have Asian-Americans of both sexes most often used hanging as a method of suicide while other groups employed it much less often? Why has firearm use increased and hanging decreased among these Asian-American groups? Why has poison as a method increased in recent years for Japanese-American women? Only conjecture can be presented for many of these questions, and each raises and points to additional research questions.

Possible explanations for the increases in proportions of individuals of almost all sex-race groups who kill themselves with firearms have been implicated by earlier considerations of suicide methods. The components of this explanation follow from several factors. There is general agreement that firearms are a suicide method of high (Seiden, 1977) or the highest (Card, 1974) lethality. There is increasing availability of firearms in the U.S., growing acceptance of firearm ownership and familiarity, as well as the relative ease in obtaining or

purchasing a firearm (see e.g., Boor, 1981; Frederick, 1978; Seiden & Freitas, 1980; Taylor & Wicks, 1980). Others (Marks, 1977; Marks & Abernathy, 1974) have even suggested that firearms are the most socially acceptable method, particularly for males. The combined presence of these factors in a single cultural setting probably explains much of the increase in firearms as a suicide method in completions for most sex-race groups. Given these same conditions and explanations, however, it is unclear why the proportions of firearms in completed suicide have been declining among Native American males. The explanation might be found in a consideration of the sociocultural setting of this group and how it differs from that of the U.S. as a whole. Such differences and their change with time, however, are not apparent.

The decline in the use of poisons by Whites and Blacks of both sexes has been largely ignored in the literature. Certainly the availability and cultural acceptance of possession for solid and liquid poisons, carbon monoxide from automobiles and other gases are as high and probably higher than for firearms. The lethality of ingesting the former two however is quite low (Seiden, 1977; Card, 1974) while the third (carbon monoxide poisoning) is quite high (second behind firearms according to Card, 1974) and the fourth (other gases) is quite low (even lower than for drugs according to Card, 1974). Clearly carbon monoxide poisoning is much closer to the situation for firearms than are the other three poisoning methods mentioned. Published official national data, however, are not available to separate these poisoning methods beyond what is displayed in Figure 2, and the obvious problem of

unavailable data for 1939-1967 prevents a clearer assessment of trends over time.

Figure 2 shows that sex is most important for differences in the use of solid/liquid poisons while race is most important for gases. Males do not often employ the former while women do, and Whites often use the latter while Blacks do not. Although published official national data allow no further breakdown of the gas category, McIntosh (1980) was able to do so for 1976. Most suicides by gas poisonings for both sexes and races were by motor vehicle exhaust, i.e., carbon monoxide, a very lethal method. Therefore, although not often used compared to firearms, and although declining in use as observed for solid/liquid poisons, there are good reasons to separate gas from solid/liquid poisoning. This is particularly so since poisoning by solids and liquids can be considered the "traditional" culturally accepted method for women just as firearms were suggested to be for males (the latter by Marks, 1977, and Marks & Abernathy, 1974). Such a case cannot be made for gas poisoning. If such a separation of poison substances is performed, it is discovered that firearms are employed more often by even White females than are solid/liquid poisons.

Given the high availability of all poisoning methods then, even recognizing the differing lethality, why have there been declines in their proportionate use as a suicide method? It has been suggested that women are turning more often to firearms as their method of suicide, perhaps indicating role changes (Marks & Abernathy, 1974). In addition, a portion of the lethality factor involves the time that poisons of all types require to result in death. This time increases the chances for discovery

and rescue (Card, 1974). With advances in medical technology, rescue in such cases could be suggested to have improved over time and this might also be involved in explaining why proportionately fewer completed suicides are by poisons of all kinds. In other words, the act goes from a potential suicide completion to a suicide attempt not resulting in death.

The remaining questions that were posed regarding the present research results pertain to Asian-Americans. A possible explanation will be posed for the divergent choice of hanging as a method, the declines in its use, and increases in firearms. It has been tentatively suggested (McIntosh, 1980) that the preference for hanging results from the existence of strong Asian-American subcultural groupings and the maintenance of original-culture customs and beliefs. Hanging is the most employed method in, for instance, Japan and firearms are rarely employed (see, e.g., Iga, Yamamoto, Noguchi, & Koshinaga, 1978). If a strong subculture exists, then socialization and (in this case) subcultural expectations about methods are at work (as suggested to be occurring on a national level by e.g., Marks, 1977, and Marks & Abernathy, 1974). Thus, similar choice in suicide methods to that of the culture of origin could be expected. Therefore, the observed preference for hanging among Asian-Americans might be explained.[2] If acculturation and assimilation processes take place and the beliefs and customs become altered or dropped, so should behaviors such as method choice in suicide, most likely changing in the direction of the group to which acculturation is taking place. Thus, the drop in the proportion of suicides by hanging and the increase in firearms can be seen as lessening the use of traditional

subcultural methods (hanging) and increasing adoption of the larger culture's methods (firearms). A similar explanation might explain the increase in utilization of poisons by Japanese-American females. Seiden (1970) suggested that increased rates of suicide, from low rates, might be a "ticket" to entrance into U.S. society for Blacks. Such an explanation could also be extended to methods, which would assert that entrance into U.S. society brings with it a move not only toward its suicide rate, but also its methods of suicide.

The only difficulty here with an acculturation explanation is the high proportionate use of firearms by Chinese-American males in the 1920's and 1930's. Since ties to the culture of origin were probably greater during that early time period, the choice of firearms as often or nearly as often as hanging is curious and problematic from the acculturation standpoint. Perhaps the process of acculturation is altered, with respect to behaviors such as suicide method utilization, by factors such as the history of a minority group within the new culture. Although exactly how such a process might work is uncertain, the extreme difficulty of this Asian group in the U.S. during this time period may have affected suicide methods chosen in some fashion.

The implications for these findings regarding firearms and prevention have been discussed elsewhere (Boor, 1981; Brown, 1979; Seiden, 1977), but research needs to be performed which looks specifically at the issues, implications, and explanations raised in this investigation. In addition, still more could be done to discover information regarding other U.S. ethnic/racial groups, for example, Hispanic Americans. The compilation of

such information about specific racial/ethnic groups should aid the individuals and agencies working to prevent suicide among them. This present research calls into question the assumption of homogeneity among Nonwhites and the application of findings for all Nonwhites to these specific groups comprising the all Nonwhite population. In areas populated by large numbers of specific minorities in particular, each group must be considered individually to some extent if prevention procedures are to be most effective.

Summary

In general, firearm use increased among nearly all ethnic/racial and sex groups from 1923-1978 while the use of poisons decreased. There were differences by racial groupings for methods in the 1970's such that Asian-Americans of both sexes most often employed hanging to kill themselves, White women used poisons (solid/liquid and gases combined) most, and other sex-race groups committed suicide most with firearms. Trends and other differences by race and/or sex were also noted and explanations centering primarily on socialization were discussed.

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3. Iga, M. Personal communication, May 25, 1980.

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Footnotes

[1]The actual classification used by the National Center for Health Statistics (NCHS) combines hanging, strangulation, and suffocation into a single category. For the purposes of the present study this category will be referred to simply as "hanging." Likewise, "firearms" will be used to denote the category of firearms and explosives. In both instances these are descriptive terms since most of the suicides in these categories are by these methods.

[2]Availability may be a factor here as well. In Japan, for instance, personal possession of firearms is prohibited by law. If that means that firearms are also then less often present in Japanese-American homes, firearms are less available as a method. Similarly, Iga (Note 3) suggested that drugs may be less available to elderly Japanese-American males because they may have never been in a drugstore due to language and financial difficulties.

Table 1

Suicide Methods in the U.S. by Specific Race and Sex, 1923-1978

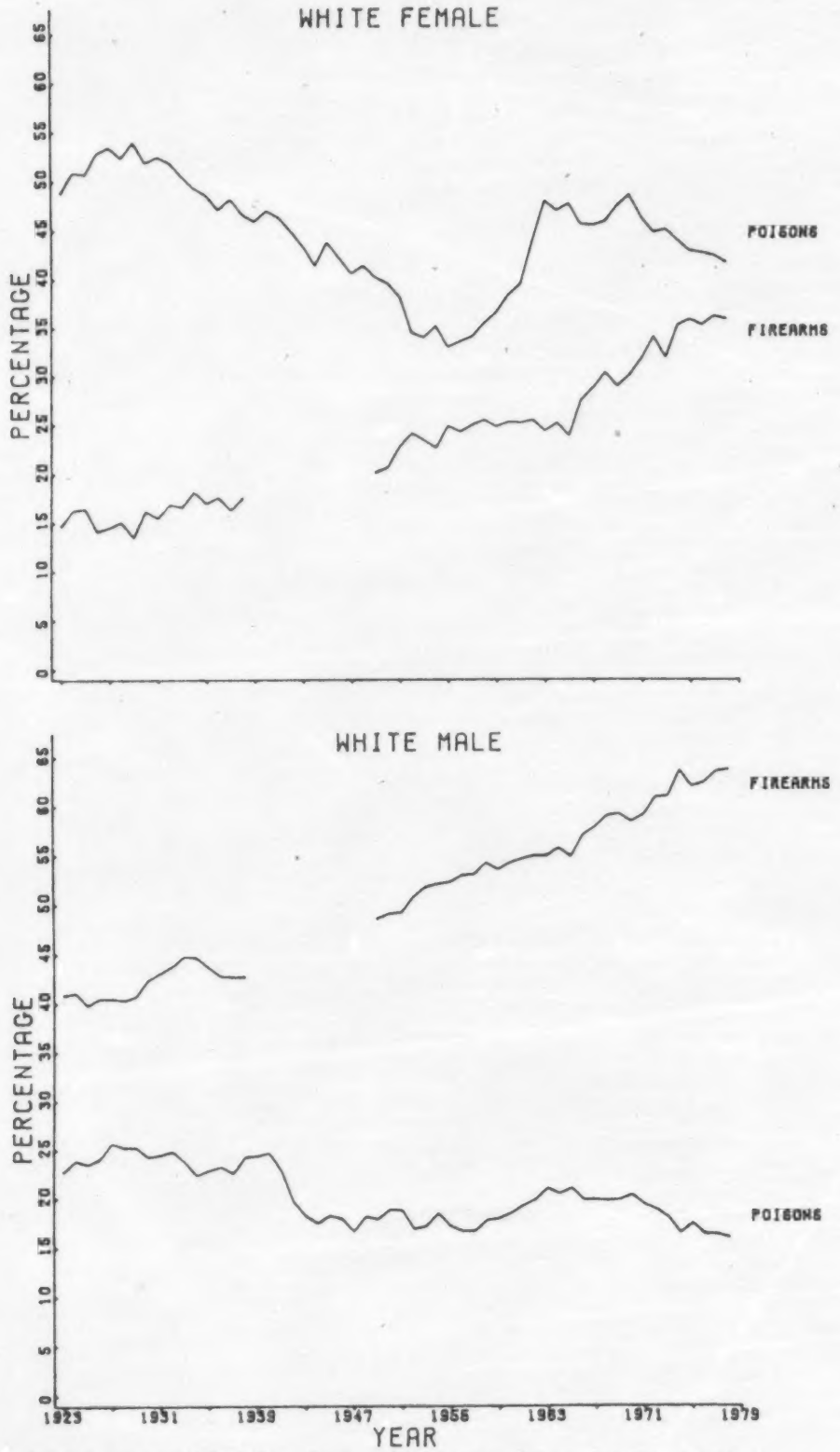
* Numbers refer to the percentage of total suicides.

Race/Yr.	Males			Females		
	Poisons	Hanging	Firearms	Poisons	Hanging	Firearms
Whites						
1923-29	24.5	19.6	40.5	52.1	14.2	14.9
1930-38	23.7	19.8	43.4	49.6	14.9	16.9
1939-48	20.2	N.A.	N.A.	43.8	N.A.	N.A.
1949-59	17.7	20.5	51.7	35.9	22.7	23.5
1960-69	20.0	15.3	56.3	45.2	13.0	26.7
1970-78	17.7	14.1	61.8	44.2	11.4	34.1
Blacks						
1923-29	17.2	8.8	49.1	46.7	5.7	20.7
1930-38	16.8	9.6	49.8	49.4	5.3	19.5
1939-48	15.4	N.A.	N.A.	43.5	N.A.	N.A.
1949-59	9.4	14.3	57.3	27.3	12.5	31.3
1960-69	9.8	13.7	57.2	29.5	8.0	34.5
1970-78	8.4	16.1	62.4	32.0	7.8	42.3
Native Americans						
1923-29	8.6	14.8	63.0	50.0	13.6	22.7
1930-38	7.8	13.4	63.7	36.2	8.5	36.2
1939-48	5.6	N.A.	N.A.	40.8	N.A.	N.A.
1949-59	2.2	21.7	70.3	19.2	15.1	26.0
1960-69	7.3	21.0	64.0	36.0	20.1	20.9
1970-78	7.4	26.3	60.3	38.9	11.9	39.2
Chinese-Americans						
1923-29	14.9	34.7	27.0	25.0	50.0	8.3
1930-38	20.2	28.7	30.4	30.0	50.0	15.0
1939-48	18.4	N.A.	N.A.	27.3	N.A.	N.A.
1949-59	14.3	43.0	20.4	18.6	58.6	5.7
1960-69	18.4	36.8	20.1	31.0	49.0	6.2
1970-78	18.0	34.3	24.7	23.8	44.6	11.4
Japanese-Americans						
1923-29	14.8	37.9	24.7	39.2	35.3	9.8
1930-38	17.2	44.7	20.4	45.7	25.7	8.6
1939-48	17.9	N.A.	N.A.	22.0	N.A.	N.A.
1949-59	14.2	52.8	12.7	20.0	62.7	5.3
1960-69	20.6	45.7	15.0	25.6	47.7	10.8
1970-78	15.5	39.3	28.4	30.9	42.0	9.9

N.A. = data not available

Figure 1

Poisons vs. Firearms as Methods of Suicide
by Race and Sex, 1923-1978

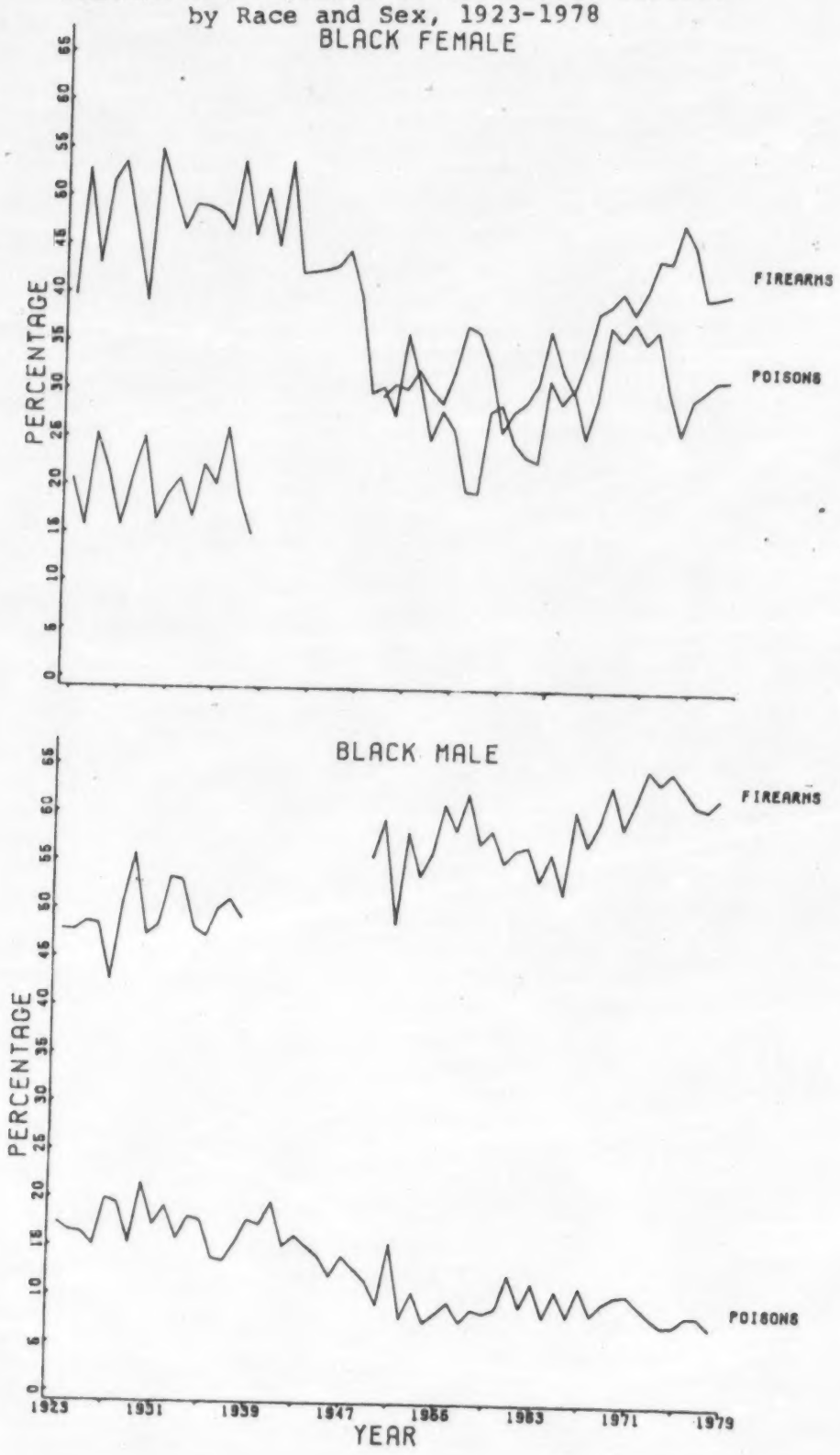


Note: Data unavailable for firearms from 1939-1948.

(continued)

Figure 1 (continued)

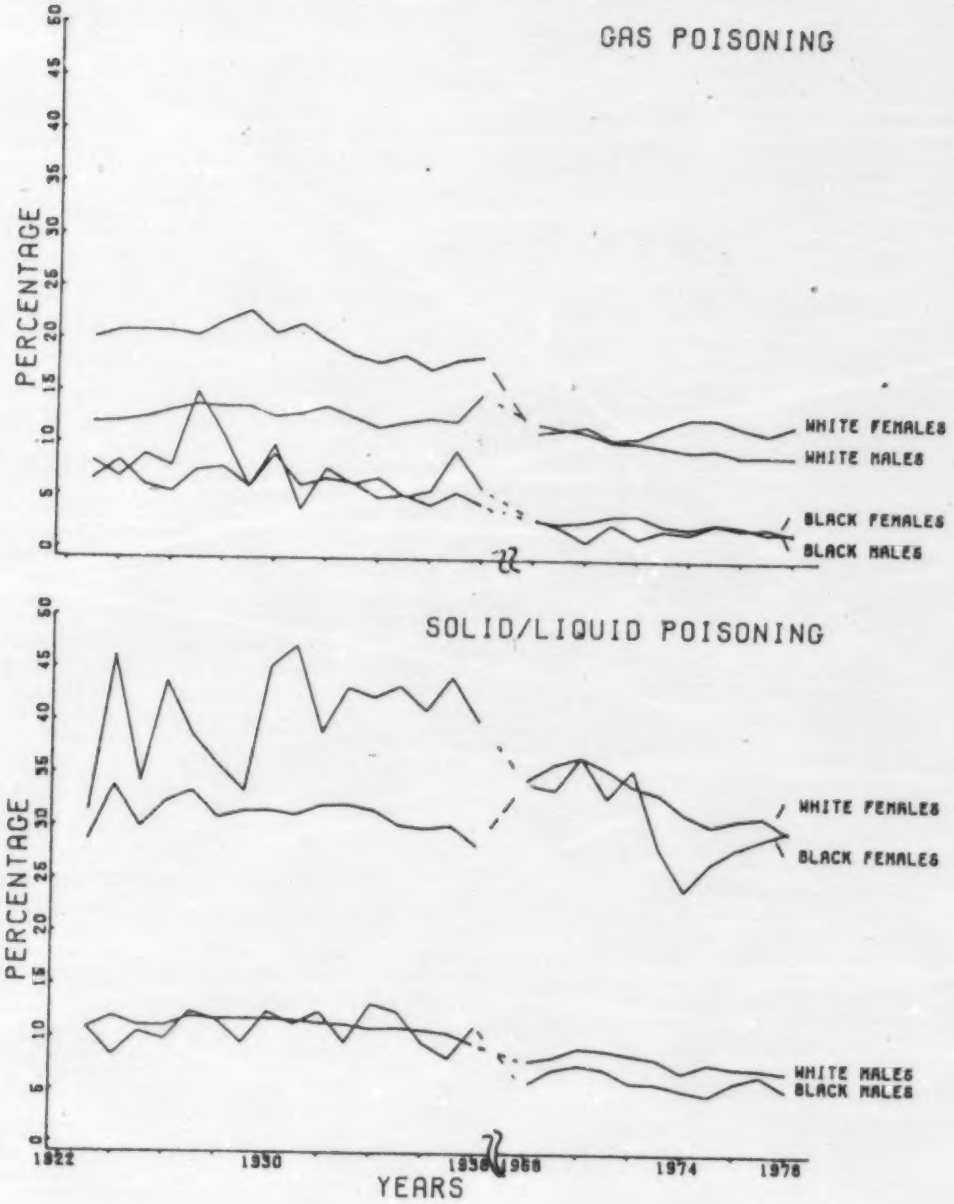
Poisons vs. Firearms as Methods of Suicide
by Race and Sex, 1923-1978



Note: Data unavailable for firearms from 1939-1948.

Figure 2

Suicide by Gas and Solid/Liquid Poisoning by Race and Sex, 1923-1938 and 1968-1978



Note: Data unavailable for specific poison methods for 1939-67.